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## **A short consideration on qualitative preservation**

Aber das Denken, wo geht das, Verfechter des Prinzips der  
Erhaltung der Kraft, hin?  
Oskar Panizza, *Der Illusionismus und Die Rettung der  
Persönlichkeit*, Leipzig 1895, § 23

1. (Quantitative) preservation means that an object (Erhaltungsgrösse) does not change in time. According to the Noether theorem, to quantitative preservation there belongs a continuous symmetry of effect, and conversely to each continuous symmetry of effect there is a preservation law. Qualities are thereby normally lost. For example, a mass of one kilogram of earth and a mass of one kilogram of gold “survive” their different qualities in their quantitative equivalents between mass and energy according to Einstein’s Law.

2. For qualitative preservation, as required by Oskar Panizza, we would await that there are not physical, but semiotic symmetry laws that guarantee that qualities survive – the question is with or without their quantities. Since qualities are signs and since signs need sign-carriers, it is to assume that the quantity must survive, too. Now let us have a look at the 10 Peircean sign classes. In them and in their 10 dual reality thematics, the qualities survive only “filtered”, i.e. the theoretically infinite qualities of the ontological space is filtered into exactly 10 sign classes, whereby semiotic model-theoretic conditions and restrictions decide, up to which degree the qualities survive. Already in an early text of Bense, we read: “Das Seiende tritt als Zeichen auf, und Zeichen überleben in der rein semiotischen Dimension ihrer Bedeutungen den Verlust der Realität” (1952, p. 80). However, if Being can only survive in the form of signs, then the sign model which seems to be the only device for qualitative preservation, must be optimal.

3. Therefore, a complete, quantitative-qualitative preservation would require a physical semiotics, or semiotic physics, respectively, to which there are up to now not more than a hand-full of papers published (cf. Toth 2009).

4. The physics of a sign concerns its sign-carrier or medium, and the semiotics of an object concern its transformation into a meta-object qua substitution (Bense 1967, p. 9). Even in the case where actually “a piece of the ontological

space” is used as a sign (for itself or for anything), there has been a substitution of the epistemological status of the object for the interpretant (sign-setter or sign-interpreter). Therefore, the position of the object is crucial for semiosis and thus for the relation between the physics of ontological space and the semiotics of semiotic space in the process of changing the epistemological status of the object. The problem is that the object remains a physical-ontological factum brutum with or without semiosis. Thus, in a certain sense, it is correct to say that semiosis is a doubling of the world. However, it is only a doubling with changed epistemological (and logical) categories of the object to be doubled. Insofar it would be more appropriate to say that each object that is declared a sign, opens a new world (or “sub-world”) of the semiotic space.

5. The basic situation between an object and a sign can be reconstructed as follows:



This means that the black bar stands for an absolute border between the sign to the left (the portrait of Professor Tournesol) and the “real” professor to the right. The comical effect in this cartoon is due to the bridge between the semiotic and the ontological space.

Thus,

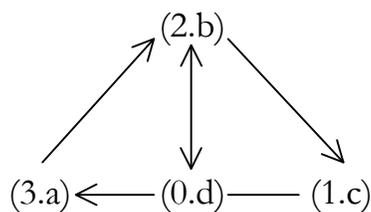
Sign || Object (monocontextural situation)

Sign ⊢ Object (polycontextural situation).

In a next step, we must ask, in which order the three fundamental categories of the Peircean sign relation, i.e. medium or (1.c), object relation or (2.b), and interpretant relation or (3.a) are working together in the process of semiosis between the object (0.d) and the sign (3.a 2.b 1.c).

Since signs are not given (vorgegeben), but thetically introduced or interpreted, the interpreter comes first who establishes later the interpretant relation. It is then clear, that second, there is the object as categorial or disposable object (cf. Bense 1975, pp. 45 s., 65 s.) which is not in an interpretant relation with the interpreter. However, the categorial object is not yet in a denomination relation with the interpretant, since a medium has not yet been selected! Therefore, third, there is the selection of a medium by the interpreter for the categorial object. Only after this selection is done, in which disposable media are turned into relational media (Bense 1975, pp. 45 s.), an object-relation can establish, and this object-relation established between the interpreter, the categorial object and the relational media. During this establishing process, the interpreter becomes the interpretant relation, so that relational media, object relation and interpretant relation form the elementary monocontextural sign model that is transcendent to its categorial object. However, since in our model of semiosis the categorial object was part of sign relations from the beginning, we have the elementary tetradic polycontextural sign model, in which, however, the categorial object does not stand in any relational, but only in categorial relation to the three relation of the monocontextural sign.

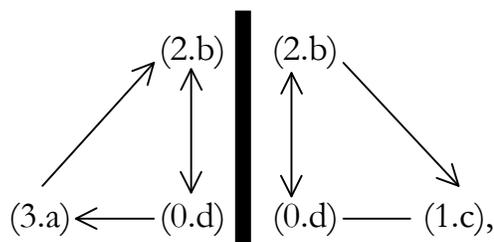
We thus come to the following 4-adic sign model



Only the relation between (2.b) ↔ (0.d) is bilateral, since this is the mutual exchange (substitution) relation between the categorial object and the object relation of the sign. In the relation (3.a) ← (0.d) the arrow points only to the interpretant, given the fact that already categorial objects possess an intrinsic pre-semiotic trichotomy which is later inherited by the semiotic trichotomies (cf. Toth 2008, pp. 166 ss.). No direction of the relation is indicated in (0.d) – (1.c), since the choice of a media is arbitrary in that sense that the media is not

obliged to choose a quality, quantity or relation to have in common with the categorial object. However, as soon as the bilateral relation between categorial object and object relation is established, the direction of the relation between object relation and media  $(2.b) \rightarrow (1.c)$  point to the media, because the pre-semiotic trichotomy has now already established from  $(0.d)$  to  $(2.b)$ , whereby  $d, b \in \{.1, .2, .3\}$ , so that these three trichotomic values are pre-given and the choice of the media from the object relation is now in this respect not fully free anymore, but determined, as the inclusive semiotic order  $(a \leq b \leq c)$  has also been inherited with the pre-semiotic trichotomies from the level of the categorial object. The last remaining relation  $(3.a) \rightarrow (2.b)$  says that the interpretant relation as a connex establishes a relation of sense over the relation of meaning that has already established at this point by the semiosis.

If we now split our pre-semiotic sign model into two halves:



we get two very interesting new sign models: To the left

SM1 = (3.a 2.b 0.d),

which is a sign model without sign carrier, but whose material function is taken over by the embedded categorial object itself. To the right

SM2 = (2.b 1.c 0.d),

which is a sign model without interpretant/designation connex. This is a variation of the dyadic Saussurean sign model enlarged by the embedded categorial object into a triadic sign relation.

It is needless to say that the above sign model consisting of the two sign models 1 and 2 is of high interest for category theoretic (and possibly also for saltatory theoretic [Kaehr]) semiotic. We will deal with details in one of the next publications.

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